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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------|-------------|----------------------|------------------------|------------------|
| 10/722,004 | 11/25/2003 | Steven K. Waisanen | 063740-9130 | 6977 |
| 23409 | 7590 | 01/10/2007 | EXAMINER | |
| MICHAEL BEST & FRIEDRICH, LLP | | | ROSENBERGER, RICHARD A | |
| 100 E WISCONSIN AVENUE | | | ART UNIT | PAPER NUMBER |
| MILWAUKEE, WI 53202 | | | 2877 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

| | | |
|------------------------------------|------------------|-------------------------------------|
| Application No. | 10/722,004 | Applicant(s) WAISANEN, STEVEN K. |
| Examiner Richard A. Rosenberger | Art Unit 2877 | |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 12 December 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) The period for reply expires 3 months from the mailing date of the final rejection.
 b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) They raise the issue of new matter (see NOTE below);
 (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. Applicant's reply has overcome the following rejection(s): _____.
 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 21-35.

Claim(s) objected to: _____.

Claim(s) rejected: 36-48.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
 13. Other: _____

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1. The remarks filed on 12 December 2006 with the amendment after final argue that “the focus in on whether the final result achieved by the claimed invention is useful, tangible, and concrete” (page 7, lines 20-21, emphasis in original omitted) and that “the focus is on whether the final result achieved be the claimed invention is tangible” (page 9, lines 2-3, emphasis in original omitted). It is notes that the rejection is not based upon any lack of utility or of concreteness, but only that the final result of the claims lack the required tangibility. In claims 36-48 as they have been herein amended, the final result is not tangible, but a mere abstract result of a comparison and/or a mere abstract result of a mathematical determination. Neither the result of the comparison in claim 36 nor the result of the calculation in claims 45 has been made tangible in any manner, nor used to accomplish any tangible result. The remarks point out that the “final result of this inventions [of claim 36] is a determination of a position of the rail system” (page 9, lines 24-25) and “final result of this claimed invention [of claim 45] is a calculated deviation ...” [page 10, lines 14-15], both of which are nothing more than abstract numbers; the fact that these abstract numbers can be interpreted by a user as representations of tangible, real-world features does not make the abstract numbers tangible.

2. The remarks filed 12 December 2006 regarding the rejections of claims 36 and 45 have been considered, but have not been found to be persuasive. Clearly the Miyahara reference at least clearly suggests, contrary to the remarks, “analyzing a captured image to determine a center point of the captured image, the center point having an X

dimension and a Y dimension; comparing the X and Y dimensions; and calculating a deviation of the center point with respect to the datum point" (remarks, page 11, lines 16-19). Although the reference uses different words to describe the technique than those in the claims, those in the art would have understood the reference to possess these features.

3. In the final rejection, the examiner noted that the specification treats centroid analysis as well known. The instant specification mentions the centroid analysis almost in passing in the abstract and on page 2, lines 13-14, and states that it is done by commercially available software (page 12, lines 14-19). The centroid analysis is also mentioned in originally filed claims 4 and 18. However, nowhere does the disclosure as filed teach how to "make and use" the centroid analysis; the "sub-pixel interpolation" (page 12, line 20) simply is not in and of itself disclosure adequate to "make and use" such analysis. Rather, the disclosure as filed does little more than merely mention the use of such analysis. It is of course correct that the disclosure, to be complete under 35 USC 112, first paragraph, need not disclose the details of that which is so well known that such mere mention amounts of adequate disclosure. The examiner was, and at this time remains, of the opinion that centroid analysis is so well known that the type of mention in the specification is sufficient under 35 USC 112, first paragraph, for complete disclosure.

Applicant, however, appears to disagree. In the remarks filed 12 December 2006, applicant states that "Applicant will traverse the use of official notice ... with respect to

the fact that centroid analysis is known..." (page 12, lines 27-28). If this were true, that centroid analysis were not well-known, then the disclosure would be inadequate under 35 USC 112, first paragraph, and at least claims 39, 46, and 48, which claim the centroid analysis, would be clearly unsupported by adequate disclosure in the specification. Further, as there appear to be no disclosure as to any other technique, except perhaps for the mere mention of the possibility that other techniques might be possible (specification, page 12, lines 21-23), it would appear that all of the claims would be inadequately disclosed, as nowhere does the disclosure as filed teach how to "make and use" any technique for determining the position of light spot, which is necessary for the actual use of the invention.

Based upon his experience in the art, the examiner is maintaining his position that centroid analysis is so well known in the art that the disclosure as filed is adequate. However, Applicants, as workers in the art, may be more familiar with the art than is the Examiner, so if Applicants affirm their stated position that centroid analysis is in fact not so-well known in the art that mere mention is adequate for full disclosure, then the examiner will reconsider his position and consider making the rejection of the claims under 35 USC 112, first paragraph, as being inadequately supported by disclosure that Applicants' traverse of the well-known nature of centroid analysis would require.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard A Rosenberger whose telephone number is (571) 272-2428. The examiner can normally be reached on Monday through Friday during the hours of 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R. A. Rosenberger
8 January 2007

Richard A. Rosenberger
Primary Examiner